

Rio Rancho Well Water: What Every Homeowner Should Know

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Arsenic, Iron and Hardness: Which Technology is Right?

Because Rio Rancho well water is rated by the EPA as “Extremely Hard” and contains arsenic that far exceeds the EPA Maximum Contaminant Level (MCL) of 10 micrograms per liter, as well as iron, specialized equipment may be required. *Contrary to some sales claims*, an ordinary softener is not designed to abate arsenic, iron, manganese, sediment, corrosion, odor, chlorine, nitrate, industrial chemicals, pharmaceuticals, or radon. However, a *light commercial* system that utilizes an iron/manganese removal media, whole house carbon filtration and a 5 stage reverse osmosis with an arsenic stage will remove the following contaminants: hardness, manganese, bacteria and viruses, iron and iron bacteria, sulfur odor, rust and sediment, hydrogen sulfide, arsenic, radiological contaminants including radon, pesticides and chemicals. ^{2,3,4,6} *With such equipment you will not need an expensive iron filter. Buyer Beware!* Softeners designed for municipal water are not designed for complex well water problems. Light commercial equipment is priced at or below ordinary equipment, and has a better warranty. “No-salt” “softeners” do not soften water but are worth exploring if your iron is not too high.

Debunking the Myths: An irresolute EPA has finally spoken! *Softener effluent is not detrimental to groundwater or to septic systems.* ^{4,7,9} Softening does not promote bacteria or corrosion, remove trace minerals, harm plants, lawns or fish or add salt to your drinking water. ^{4,5,8,9}

The good news: According to the US Department of Interior “The savings resulting from softening in decreased soap consumption, smaller plumbing repair bills, and longer life of the water heater often more than pays for such equipment.”¹⁰ Hard water is hard to live with. It scales the skin and hair, forms skin irritating soap curd in clothing, bedding and linens, and stains showers, tubs, sinks and dishes.^{4,9,10}

Is My Drinking Water Safe?

All well water is subject to microbial contaminants (coliform, e.coli, cysts), pesticides, herbicides and industrial chemicals. Rio Rancho well water contains arsenic and water borne radon at levels far higher than the EPA Maximum Contaminant Levels (MCL).^{4,6,8,9} Moreover, EPA TCLP pipe leaching toxicity limits are often exceeded. For these reasons the EPA recommends that you test your private well water annually. Hall Labs (345-3975) is state certified and offers basic testing from \$75.00 to \$200.00. Ask your water treatment specialist for **free testing**.

Reverse Osmosis (RO) with an arsenic stage at point of use (in the kitchen) is the EPA “best available technology” (BAT) for removal of arsenic and all of the above primary (health related) contaminants ^{4,8,9} Five Stage RO is much more effective than three- or four-stage RO. *Buyer beware!* Cheap ROs are not designed for the sediment and high TDS of well water, severely limiting their life and their efficacy. Cheap ROs waste huge amounts of water. *Insist on a WQA Certified RO.*

References

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7. EPA Fact Sheet 3, *Water Softeners*, EPA 625/R-00/08
8. EPA Fact Sheet 815-F-00-015, *Drinking Water and Arsenic Treatment*.
9. Water Quality Association, www.wqa.org; also www.wellcarehotline.org, www.watertech.online.com; corrosion-doctors.org
10. Many studies by U.S. Dept. Of Commerce, U.S. Dept. Of Labor, U.S. Bureau of Labor Standards, Univ. Ill., UNM Studies, US Dept. of Interior Water Supply Paper 1299.